## State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-160
Relating to Certification of New Motor Vehicles

## ISUZU MOTORS LIMITED

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1998 model-year Isuzu Motors Limited exhaust emission control systems are certified as described below for light-duty trucks:

Emission Standard Category: Transitional Low-Emission Vehicle (TLEV)

Fuel Type: Gasoline

Engine Family: WSZXT02.22HK Displacement: 2.2 Liters (134 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Three Way Catalytic Converter Heated Oxygen Sensors (two) Exhaust Gas Recirculation Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) TLEV certification exhaust emission standards for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	_Miles_	NMOG	_co_	<u>NOx</u>	НСНО	CO (20°F)
3751-5750	50,000	0.160	4.4	0.7	0.018	12.5
	100,000	0.200	5.5	0.9	0.023	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.98

The certification exhaust emission values set forth for NMOG reflect application of a 0.98 RAF for 1998 model-year TLEVs. The TLEV certification exhaust emission values for this engine family in grams per mile are:

Loaded Vehicle Weight (lbs.)	Miles	NMOG_	* <u>co</u>	<u>NOx</u>	нсно	CO (20°F)
3751-5750	50,000 100,000	0.106 0.118	2.0	0.3	0.0002 0.0003	9.6 n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 19 day of June 1997.

R B. Summerfield, Chief / Mobile Source Operations Division

## 1998 MODEL - YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT - DUTY TRUCKS AND MEDIUM - DUTY VEHICLES

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Engine code	Vehicle Models	Trans.	ETW	DPA	Ignition	EGR	Catalytic
(also list	(if coded see	(M5, A4	or	or	(ECM/PCM)	System	Converter
CA/49ST/50ST)	attachment	etc.)	Test Wt.	RLHP	Part No.	Part No.	Part No.
222H- 1 (50ST)	XO- R1A XO- R1B XO- R1C	M5	3750	13.6	ECM 8162633490 8093552190*	25180481	TWC 8251655950

XO-R1A: RODEO 2WD, Long wheelbase, P215 tire XO-R1B: RODEO 2WD, Long wheelbase, P235 tire XO-R1C: RODEO 2WD, Long wheelbase, P245 tire

Note: \* ECM is changed by RC98T06.

Date Issueed: 4-10-97 (98B-03) Revisions: 6-10-97 (98B-04) 7-2-97 (98B-06)

9-19-97 (98B-AC-03) / RC98T06

E.O. #A - 20 - 160	
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1998 MODEL - YEAR PASSENGER CAR	AIR RESOURCES	BOARD SUP	PLEMENTAL	DATA CUEET
PASSENGER CAR	S, LIGHT - DUTY	TRUCKS AND	MEDIUM - DU	TY VEHICLES

Page 2

Manufacturer: IS All Engine Codes Exh Std : CA Veh Class(es): Single Cert Std for Fuel Type(s) : Exh Emiss Test Fo	Tier- 1 TLI PC LDT 1 r Multi- Class Eng Dedicated CNG LNG	EV <u>x</u> LDT Fam : _ Flex-Fue	LEV	ULEV_ DV1 specify:	SULEV MDV2 ME N/A, LDT1, M Bi- Fuel	, ORVR: \ ; US ( )V3 MD\ IDV1, MDV2, _ Gasoline	/ES NO _x EPA Tier- 1 _x /4 MDV5 MDV3, MDV4) _x Diesel
Evaporative Erniss Service Accum: NMOG Test Proce	Diesel sion Test Procedu Std AMA ×	: 13 CC	R 2282	40 Fed	CFR 86.113-90	ther (specify) 40	CFR 86.113-94
NMOG Test Proce Engine Configurat Valves per Cylinde Engine: Front _ Exhaust ECS (e.g.	ion ; <u>L4</u> er : <u>4</u> × Mid_ F	Displace	ement : _ Rated HP Drive : F	2.2 / : WD SF	VL Test Proc : Liters 130	SHED	Pt Source <u>×</u> Cubic Inches RPM 4WD-PT <u>×</u>
Engine code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment	(M5, A4	ETW	DPA	lgnition (ECM/PCM)	FGP	Catalytic

	Engine code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment	Trans. (M5, A4 etc.)	ETW or Test Wt.	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
	222H- 1 (50ST)	WO- 83B WO- 83C	M5	3875	14.5	ECM 8162633490 8093552190°	25180481	TWC 8251655950
L							·	

WO-S3B: AMIGO 4WD, Short wheelbase, P235 tire WO-S3C: AMIGO 4WD, Short wheelbase, P245 tire

Note: \* ECM is changed by RC98T06.

This SDS sheet was effected on our running change No. RC98T05 which introduce new vehicle model AMIGO.

Date issued: 9-8-97 (98B-08)

Revisions: 9-19-97 (98B-AC-03) /RC98T06

11-19-97 (98B- 09)